The EDITH *and* LORNE PIERCE
COLLECTION *of* CANADIANA

Queen's University at Kingston

Confidential.

[McGill University.]

MEMORANDUM PREPARED BY THE PRINCIPAL FOR THE INFORMATION OF THE BOARD OF GOVERNORS, Dec. 3, 1890.

The Principal, as desired by members of the Board, begs to submit the following memorandum of additions and improvements, in his judgment required to enable the work of the Faculties of Arts and Applied Science to be carried on in a satisfactory manner through the next session.

It is to be understood that the changes advised, though all urgent, are not alike in the amount of their urgency; but it must be observed that the supply of one want always causes others to be for the time more severely felt. For this reason, while we cannot be too grateful for the recent large benefactions bestowed on the University, it is still necessary to direct attention to other wants as yet unsupplied, and which seriously concern the educational interests represented by the University, and more especially those of the Faculty of Arts. which is the properly Academical Faculty and that on which all the others depend.

It is also to be understood that the endowment of any unendowed Chair will have the effect of setting free College funds which may be employed in aid of other Chairs, so that there is no conflict of different interests in this matter. It should be stated in this connection that there are at present no special endowments for Latin, Mathematics, French, German, Hebrew, Zoology or Botany, or for any of the new Chairs or Lectureships referred to below.

I. Faculty of Arts.

The following improvements and additions are urgently needed for next session in this Faculty, in view of the increasing number of students in Arts, as well as in view of the probable increase in the number of students in Applied Science for whom the Faculty of Arts has to provide instruction in certain branches. These demands are

independent of the education of women, which it is hoped will be fully provided for by the special endowment of the Donalda Course; but some of them might be met, without expense to the University, provided an additional endowment were immediately given to found the College for Women, as contemplated by the Chancellor.

It is also to be observed that much of the instruction received by the students in Applied Science and a portion of that of students in Medicine and Veterinary Science, is given by the Professors in Arts and in the rooms of that Faculty, and without any special provision for the labour and expense involved.

The Faculty of Arts has been requested to consider the practicability of increasing its fees or reducing the number of exemptions, but the sum immediately available from any action of this kind will be small, more especially as we have to consider the competition of other Canadian Universities and the consequent probability of losing rather than gaining by any increase of fees.

RECOMMENDATIONS.

1. Division of the Chair of Classics: Rev. Dr. Cornish to retain the Professorship of Greek, and Dr. Eaton to have that of Latin, with one Lecturer or Assistant, chiefly in Greek. This would complete the Classical Department at an additional cost of say $2400.

Dr. Eaton is very desirous to institute a special study-room for advanced classical students, and if a room can be set apart will exert himself to obtain reference books and specimens.

2. Division of the Chairs of Mathematics and Natural Philosophy, so as to enable Dr. Johnson to devote his time to the Chair of Natural Philosophy, and to relieve Prof. Chandler from instruction in Arts Classes, and thus to enable him to give his whole time to Applied Science. The additional cost would be from $1500 to $2500; but it would be desirable to have the best man procurable.

3. The subjects of Philosophy, English, Modern Languages and Hebrew should be strengthened by the following additions:

(*a*) The salary of the present Lecturer assisting Dr. Clark Murray and Prof. Moyse in Philosophy and English should be raised, and his services should be secured for one of these subjects; a second Lecturer being employed for the other.

(*b*) There should be a Lecturer or Assistant in French.

(*c*) There should be a Professor of German instead of a Lecturer.

(*d*) The salary of the Professor of Hebrew should be increased.

The additional cost would be say $2500.

The work in all these departments is now very heavy, owing to the large number of students not only in Arts but in Applied Science and Theology attending the classes.

4. There is at present no provision for salaries for Elocution or Gymnastics. Both should be provided for.

5. Chairs or Lectureships of History and Political Economy and of Animal Physiology and Hygiene are much needed, and have been asked for in the interest of the Students in Arts and Law as well as of those in training as teachers, and by occasional students. The latter might be arranged for in connection with the Chair of Zoology or a Lectureship in that subject, which is now an appendage to the Logan Chair of Geology.

6. One or more assistants will be needed in Experimental Physics so soon as the new Physical Building is inaugurated, but for next session one temporary assistant will suffice.

7. It may fairly be anticipated that so soon as the Donalda College for women is fully endowed, some part of the additional expense involved in the above will be borne by it; and if this can be relied on, a sum of say $7,500 per annum added to the general fund or given in special endowments for any of the above mentioned objects, would meet our requirements for the present. It will be observed, however, that I have not referred to the salary of a Librarian, or to Museum and Library funds, the need of a better and more accessible Gymnasium, a College Dining Hall, a University Building and Convocation Hall, and some other matters mentioned in the printed statement issued by the Governors in 1886, and which are still unprovided for.

8. Additional class-room accommodation for classes in Arts for men is required. In this connection it must be borne in mind that in

addition to students in Arts about 150 students in Applied Science and other Faculties attend classes in Arts, and crowd the rooms. Also, that should the rooms become too small for the larger classes, these must be divided, so that additional time would be required.

The present buildings may afford room for extension as follows :

(1.) On the removal of the Faculty of Applied Science, classes in Arts may be transferred to the east wing ; but next session a portion of this building will be required for temporary use of Experimental Physics classes under Prof. Cox.

(2.) On the removal of the Natural Philosophy Class to the new Physical building, a class-room may be made in the centre building suitable for one of the larger classes, but this relief cannot be obtained till 1892.

(3.) On removal of the Donalda Classes, the additional space now greatly needed for the Chemical Laboratories and Assaying Rooms may be secured.

(4.) On removal of the Mining Models, &c., and Applied Science Library, some space may be found for temporary, though insufficient, reading rooms, in the Library and west Corridor. This may be available next session. A new Library building with adequate reading and study rooms is however urgently needed, and when this is erected it will set free some valuable space in the William Molson Hall.

These improvements would not involve great cost, and might, with the rooms used in the Peter Redpath Museum and new Physical building, provide for Arts classes for many years without any very important change in the present building.

II. Faculty of Applied Science.

It is assumed that the class-rooms of this Faculty will be provided in the new W. C. McDonald and Workman Engineering buildings.

1. The salaries of the Professors in this Faculty should all be raised at least to the regular University standard at a cost of say $2000 to $2500. per annum. This includes relieving Prof. Chandler from his work in the Faculty of Arts, and devoting his whole time to students in Applied Science. The increase in the fees of this

Faculty should allow increased expenditure for the above objects without cost to the University, but if endowments could be provided for some of the Chairs now unendowed, this would be very desirable.

2. A Lecturer on Mining and Metallurgy will be needed next session. Dr. Harrington who has hitherto lectured on these subjects as an extra duty, can no longer do this in connection with the proper work of his Chair of Chemistry and Mineralogy, and the Department of Mining Engineering is of great importance and may be expected to bring in at least $1000 per annum in fees. It might be desirable to provide in this department machinery for ore-dressing and some metallurgical appliances, but these could be procured by degrees, and only a very inexpensive building would be required to accommodate them for the present, or perhaps space in some of the buildings provided for other purposes.

3. I have not considered in the above the additional Demonstrators and Assistants required in the new McDonald and Workman buildings.

As the greater number of the above objects were brought before the friends of the University in the printed statement issued by the Board in 1886, and have been from time to time referred to in reports and addresses, and have been kept in view when intending benefactors have asked for advice, it is possible that some of them may have been provided for in wills or prospective benefactions ; but the need of most of them has become more and more pressing, and they now demand immediate attention. If they can be met by additions from any source to the general funds of the University this would be the best method, as it would not interfere with the intentions of those who may wish to promote special objects.

It is very desirable that as much as possible in the direction indicated shall be done before the session of 1891-2 ; and the undersigned need scarcely add that it would be a source of great satisfaction to him could the more important wants, especially those of the Faculty of Arts, be supplied during his own continuance in office.

J. WM. DAWSON.

Dec. 3, 1890.

APPENDIX TO THE FOREGOING MEMORANDUM.

[May 1891.]

Comparison with Toronto University.

As similar questions to those in the foregoing memorandum are being discussed in Toronto, and as that University in some respects resembles McGill in its range of work, a comparison may be useful.

The relations to the Toronto University of the Schools of Law, Medicine and Practical Science are not identical with those of our professional Faculties, but are sufficiently similar to enable comparisons to be made.

Women are not taught in separate classes, but the number of students is so great in the leading subjects that the classes have in some cases to be divided into two or even three sections, so that a similiar duplication of lectures occurs to some extent.

The attendance of students on the several classes in Toronto is very unequal. This arises partly from the influx of professional students into some classes rather than others, but perhaps more largely from the extensive options allowed, and from the tendency of students to prefer those classes which will pay best with reference to certain professions or which are least burdened with laboratory work.

The following numbers taken from a recent report illustrate this. In last session the largest classes were—English 390, Latin 340, French 352, German 343, while Mental and Moral Philosophy had 211, Mathematics 183, Physics 120, Greek 162, Geology 95, Zoology and Botany 86, Chemistry 50.

It will be seen, on consulting the table on the following page, that this inequality is to some extent compensated by the employment of Lecturers and teaching Fellows in the larger classes ; though there is still much complaint of insufficiency of teachers, especially in Latin and in Modern Languages.

The teaching staff in Toronto as compared with McGill is as follows:—

Subjects.	Toronto.			McGill.			Summary.
	Prof.	Lect.	*Tutor	Prof.	Lect.	Tutor	
Classics	1	2	1	2			Toronto, Profs.† . 12
Or. Languages	1			1			" Lects. . . 8
English	1	1		1	½§		" Tutors . . 8
Ment. & Mor. Phil.	2†		1	1	½		28
History, &c	1				* *		
Nat. Philos	1	1	1	1½		‡	McGill, Profs. 11
Mathematics	1		1	½	½		" Lects. 3½
Geology	1		1	½	1		" Tutors, 1
Zool. and Botany.	1	1	1	1½			15½
Chemistry	1		1	1		1	
Political Science	1		1				
French		1		1			Annual Expense:
German		1			1		Toronto, $53,500
Ital. and Spanish		1					McGill . . 28,000

* In Toronto University the Tutors or Assistants are termed Fellows, and are usually graduates carrying on special studies while teaching.

† One of these has leave of absence for three years.

‡ Assistance will be provided for next session.

§ The fractions represent the fact that the division of subjects is not precisely the same in McGill.

* * The Professor of English is also Lecturer in History.

The Toronto staff is larger than ours in aggregate number, though the number of Professors is the same. The difference arises from the large number of lecturers and teaching Fellows. This has in the case of Toronto the advantage of permitting more subdivision of classes, but the disadvantage of committing much of the work to teachers of immature minds and small experience.

The expense of the Toronto staff is much greater than that of ours. The salaries of Professors are somewhat larger, the maximum being $3,200, and the Tutors and Lecturers receive from $500 to $1500 each per annum. There are also some attendants, &c. not enumerated above.

In a recent Report of a Committee of the Senate, after careful comparisons of the work in each department and the staff employed, certain inequalities and deficiencies are noted, and the following recommendations are made as to more or less urgent wants :—

1. Professors to be appointed in French and German with a Lecturer or Tutor in each.

2. A special Professor of Latin and a Lecturer or Tutor in Latin and one in Greek.

3. An additional Tutor in English.

4. A Lecturer or Demonstrator in Physics.

5. A Lecturer and additional Tutor in Mathematics.

6. The consideration of Philosophy is deferred till the new Professor assumes his duties, but an additional Lecturer or Tutor is recommended.

7. In Biology, the Botany to be a separate Chair from Zoology.*

8. The appointment of a Lecturer in Hebrew.

It will be seen that the general tenor of the above recommendations, which were not known to me till after the foregoing memorandum was prepared, is very much in accord with its suggestions, though these would not augment our staff to the level of that of Toronto. They would, however, strengthen us in regular Professors and Lecturers rather than in temporary Instructors like the Teaching Fellows, and I confess I should prefer the former, though I have no objection to a moderate amount of the latter. My belief is, however, that the inexperience of junior and temporary assistants and the frequent changes which are inevitable, give much trouble to the Professors, while the work done is often imperfect.

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* This division already exists in McGill.